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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,014	12/08/2003	Luc Nicolas-Morgantini	06028.0034-00	9097

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EXAMINER

ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/729,014	Applicant(s) NICOLAS-MORGANTINI ET AL.	
	Examiner Eisa B. Elhilo	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-20,26-43 and 45-92 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-20,26-43 and 45-92 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1 This action is responsive to the amendment filed on March 29, 2007.

2 The cancellation of claim 44 is acknowledged. Pending claims are 1-6,8-20,26-43 and
45-92.

3 A request for continued examination under 37 CFR 1.114, including the fee set forth in
37 CFR 1.17(e), was filed in this application after final rejection. Since this application is
eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)
has been timely paid, the finality of the previous Office action has been withdrawn pursuant to
37 CFR 1.114. Applicant's submission filed on 3/29/2007 has been entered.

Claim Rejections - 35 USC § 103

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-20, 26-30, 42-43 and 45-92 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Cottard et al. (US 2001/0023514 A1) in view of Sokol et al. (US 3,836,326).

Cottard et al. (US' 514 A1) teaches a composition for oxidation dyeing of hair
comprising oxidation bases chosen from para-phenylenediamines of a formula (I) as claimed in
claims 1-3 and 46-49 (see page 6, formula I), double bases of a formula (II) as claimed in claim
50 (see page 6, formula II), para-aminophenols of a formula (III) as claimed in claims 51-53 (see
page 7, formula III), heterocyclic bases as claimed in claim 54 (see page 7, paragraph, 0140),
wherein the oxidation bases are presented in the claimed amounts as claimed in claims 55-56

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(see page 8, paragraph, 0160), couplers chosen from meta-phenylenediamines presented in the claimed amounts as claimed in claims 57-59 (see page 8, paragraphs, 0162 and 0163), acid addition salts of chosen from hydrochlorides and hydrobromides as claimed in claim 60-61 (see page 8, paragraph, 0164), direct dyes as claimed in claim 62 (see page 8, paragraph, 0164), at least one oxyalkylenated fatty alcohols in the amount of 0.05 to 20% by weight which within the claimed amounts as claimed in claims 63-67 (see page 2, paragraph, 00035-0039), at least one associative polymer of fatty chain anionic associative polymer as claimed in claims 8-20 (see page 3, paragraphs, 0050-0057) and alkyl sulfates as claimed in claim 1 (see page 16, paragraph, 0319), wherein the associative polymer is chosen from quaternized cellulose modified with fatty chain as claimed in claims 26-28 (see page 5, paragraphs, 0100-0103), wherein the at least one amphoteric polymer comprises at least one fatty chain having 8 to 30 carbon atoms chosen from hydroxyethylcellulose as claimed in claims 29-30 (see page 4, paragraphs 0078-0079), wherein the associative polymer is presented in the amounts of 0.01 to 10% and 0.1 to 5% as claimed in claims 42-43 (see page 5, paragraph, 0108), additional polymers such as homopolymer of dimethyldiallylammonium chloride as claimed in claims 68-69 (see page 10, paragraph, 0206), additional polymers in the claimed amounts as claimed in claims 70-74 (see page 12, formulae (W) and (U) and paragraph, 0245), surfactants in the amounts of 0.01 to 40% as claimed in claims 75-78 (see page 17, paragraph, 0339), guar gum thickeners in the amounts of 0.01 to 10% as claimed in claims 79-81 (see page 17, paragraphs, 0340 and 0341), reducing agent in the amounts of 0.05 to 1.5 % as claimed in claim 82 (see page 17, paragraph, 0346), wherein the composition also a ready to use composition and it comprises hydrogen peroxide in the amount of 1 to 40 volumes as an oxidizing agent as claimed in claims 83-86 (see page 17, paragraph,

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0349), wherein the composition has a pH in the range of 6-11 as claimed in claims 87 and 91 (see page 18, paragraph, 0351). Cottard et al. (US' 514 A1) also teaches a process for dyeing hair and a multi-compartment device comprising the dyeing composition as described above and as claimed in claims 88-90 and 92 (see page 23, claims 72-86).

The instant claims differ from the reference by reciting a composition comprising at least one C₁₄-C₃₀ alkyl sulfates as claimed. Further the reference does not teach the claimed ratio between alkyl sulfates and associative polymer.

However, Cottard et al. (US' 514 A1) teaches and suggests the use of alkyl sulfates in the dyeing composition (see page 16, paragraph, 0321).

Sokol et al. (US' 326) in analogous art of hair dyeing formulation, teaches a composition comprising sodium myristyl sulfate as a dispersing agent in the amount of 1 to 30 % which overlapped with the claimed amounts as claimed in claims 4-6 (see col. 4, lines 60-67).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made, would be motivated to modify the composition of Cottard et al. (US' 514 A1) by incorporating the species sodium myristyl sulfate as taught by Sokol et al. (US' 326) to make such a composition. Such a modification would be obvious because Cottard et al. (514 A1) as a primary reference suggests the use of the genus alkyl sulfates in the composition (see page 16, paragraph, 0321). Sokol et al. (US' 326) as a secondary reference clearly teaches the claimed species of sodium myristyl sulfate (see col. 4, liners 60-67), and, thus, a person of the ordinary skill in the art would be motivated to incorporate the alkyl sulfates as taught by Sokol et al. (US' 326) in the dyeing composition of Cottard et al. (US' 514 A1), because the ordinary artisan would have the reasonable expectation that any of the species

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of the genus would have similar properties and thus, the same use as the genus as a whole and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to the claimed ratio as recited in claims 1 and 45, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a dyeing composition comprising associative polymers and alkyl sulfates with the claimed ratio, because Cottard et al. (US' 514 A1) clearly teaches and disclose the amounts of cationic polymers (see page 12, paragraph, 0245) and the amounts of associative polymers (see page 16, paragraph, 0315). Sokol et al. (US' 326) as a secondary reference teaches the amounts of the claimed species sodium myristyl sulfate and wherein the amounts of these dyeing ingredients are within and/or overlapped with the claimed ranges, and, thus a person of the ordinary skill would expect such a composition to have similar weight ratio between these dyeing ingredients and would expect such a composition to have similar properties to those claimed, absent unexpected results.

Further the applicant has not shown on record the criticality of the claimed ratio of the dyeing ingredients.

2 Claims 31-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023514 A1) in view of Sokol et al. (US' 3,836,326) and further in view of Laurent et al. (US 2002/0046431 A1).

The disclosures of Cottard et al. (US' 514 A1) and Sokol et al. (US' 326) as described above, do not teach or disclose the cationic amphiphilic polyurethane polymers as claimed.

However, Cottard et al. (US' 514 A1) clearly suggests the use of associative cationic polymers such as quaternized cellulose in the dyeing composition (see page 5, paragraph, 0099).

Laurent et al. (US' 431 A1) in analogous art of hair dyeing formulation, teaches a composition comprising a cationic polyurethane of a formula (Ia), which is similar to the claimed formula (IV) as claimed in claims 31-36 (see page 3, paragraphs, 0096-0105), wherein the monomer chosen from a monomer dimethylaminopropyl-methacrylamide and acrylamidopropyltrimethylammonium chloride as claimed in claims 37-38 (see page 7, paragraph, 0191 and page, 18, paragraph, 0402), wherein the monomer chosen from acrylic acid, methacrylic acid as claimed in claim 39 (see page 8, paragraph, 0208) and wherein the monomer chosen from (C₁₀-C₃₀)alkyl acrylates as claimed in claims 40-41 (see page 8, paragraph, 0211).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Cottard et al. (US' 514 A1) by incorporating the cationic polyurethane as taught by Laurent et al. (US' 431 A1) to make such a composition. Such a modification would be obvious because Cottard et al. (US' 514 A1) as a primary reference clearly suggests the use of cationic polymers in a hair dyeing composition (see page 8, paragraph, 0167). Laurent et al. (US' 431 A1) as a secondary reference clearly teaches the claimed cationic polyurethane polymers as claimed, and, thus, a person of the ordinary skill in the art would be motivated to incorporate these polyurethane polymers as taught by Laurent et al. (US' 431 A1) in the dyeing composition of Cottard et al. (US' 514 A1) with a reasonable expectation of success to arrive the claimed invention and would expect such a composition to have similar properties to those claimed, absent unexpected results.

Response to Applicant's Arguments

3 Applicant's arguments filed 3/29/2007 have been fully considered but they are not persuasive.

With respect to the rejection of claims 1-6, 8-20, 26-30, 42-43 and 45-92 under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US' 514 A1) in view of Sokol et al. (US' 326), Applicant argues that there is no motivation to combine the references.

The examiner respectfully disagrees with the above arguments because the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. "*In re Heck*, 699 F.2d 1331, 1332-33 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Iemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). Further, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed.Cir.), *cert. denied*, 493 U.S. 975 (1989). In this particular case, Cottard et al. (US' 514 A1) suggests the use of the genus anionic surfactants of alky sulfates in the hair dyeing formulation (see page 16, paragraph, 0321). It is further taught by Cottard et al. (US' 514 A1) that anionic surfactants can be chosen from fatty acid salts such as salts of oleic acid, and stearic acid (see page 16, paragraph, 0322). Sokol et al. (US' 326) as a secondary reference in analogous art, teaches clearly the anionic surfactant of the claimed species sodium myristyl sulfate as a dispersing agent to accelerate the dispersing of the dyeing ingredients in the composition (see col. 4, lines 59-62). Therefore, there is a clear suggestion and sufficient modification to one having ordinary skill in the art to be motivated to incorporate the

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anionic surfactant of alkyl sulfate (myristyl sulfate) as taught by Sokol et al. in the dyeing composition of Cottard et al. to arrive at the claimed invention with the reasonable expectation of success that any of the species of the genus would have similar properties and also for accelerating the dispersing of the dyeing ingredients and would expect such a composition to have similar properties to those claimed in the absent of contrary. Therefore, the prima facie case of obviousness has been established.

With respect to the applicant's argument about the rejection of weight ratios, the examiner would like to point out that as the optimization of results, a patent will not be granted based upon the optimization of result effective variable when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness, see *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F. 2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Further, applicant has not shown on record the criticality of the claimed ratio of alkyl sulfate and the associative polymers in the claimed composition.

With respect to the rejection of claims 31-41 under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US' 514 A1) in view of Sokol et al. (US' 326) and further in view of Laurent et al. (US 2002/0023514 A1), Applicant argues that there is no motivation to combine the references.

The examiner respectfully disagrees with the above arguments for the same reasons mentioned above.

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Further, the examiner advises applicants to provide a data or showing to demonstrate that the combination of the dyeing ingredients in the claimed composition with the claimed ratio shows unexpected and superior results over the composition of the closest prior art of record that does not teach all the claimed ingredients with the claimed ratio.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eisa Elhilo
Primary Examiner
Art Unit 1751

April 6, 2007